A retrospective multicentric study was performed from a one-year (2005) registry of patients from five primary care centres in Spain. Inclusion criteria were as follows: mild to moderate HT as per JNC-VII, British Hipertensión-Society; and DL as per NCEP-ATP III. Compliance was estimated by the relationship between the amount of dispensed and prescribed pills. Demographic variables, comorbidities, clinical parameters and sanitary resources were registered. A bivariant analysis and a multiple lineal regression analysis were done to correct the model. **RESULTS:** Compliance was estimated from the total sample of 15,606 patients (HT: 41.7%; DL: 23.1%; HT/DL: 35.2%), in 85.9% (CI = 85.4–86.4%), 81.6% (CI = 81.0–82.2%) and 84.9% (CI = 84.3–85.5%) respectively (p = 0.000; Scheffé). Explanatory variables of a better compliance in the multivariate analysis were (beta = 0.832; t = 59.1; p = 0.000): a) direct relationship: age, labour inactivity, drug price, and b) indirect relationship: glycemia, triglycerides, LDL and number of active principles used (p = 0.000). **CONCLUSION:** Dyslipidemic patients show a worse compliance than hypertensive patients, and dyslipidemia worsened global compliance in hypertensive patients. Certain clinical parameters of control, the age of the patient and the drug group are related to compliance in daily medical practice.

PCV84

COMPLIANCE IMPROVEMENTS AND HDL CHOLESTEROL LEVELS IN HYPERTENSIVE PATIENTS IN SPAIN

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OBJECTIVES: Therapeutic compliance (TC) is related to risk control in the hypertensive patient. Nevertheless there is no much information on how the improvement of TC impacts on cardiovascular risk factors (CVRF), particularly on lipid parameters, in the Spanish hypertensive patients. To analyze the relationship among TC improvement (estimated by the relationship between amount of drug dispensed and amount of drug prescribed), and the variations in LDL-cholesterol (LDLc) and HDL-cholesterol (HDL-c) levels. **METHODS:** Hypertensive patients from five Spanish primary care centres, who had registered values of LDLc and HDLc, between 2004 and 2005, were retrospectively studied. Changes in TC, LDLc and HDLc were calculated between mentioned years. Correlation between: a) changes in TC and HDL, and b) changes in TC and HDL, were calculated using the Spearman's Rho test. **RESULTS:** Of the 6960 hypertensive patients, 5094 had registered HDL-c levels in 2004 and 2005. An increase in TC of 3.8% (DE:17.7%) was demonstrated. An inverse and statistically significant relationship between LDLc and TC (p = 0.003) was demonstrated. No relationship was found between TC improvement and HDLc (p = 0.9456) **CONCLUSIONS:** In the Spanish hypertensive population, CT improvements are associated to a decrease in LDLc levels, with no impact on HDL. Available treatments are not effective enough to improve HDLc levels in the Spanish hypertensive patient.

PCV85

COMPLIANCE AND PERSISTENCE OF FIXED DOSE VERSUS FREE DOSE COMBINATION THERAPY WITH VALSARTAN AND HCTZ FOR PATIENTS WITH HYPERTENSION

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OBJECTIVE: Blood pressure control can be difficult to achieve in hypertension, often requiring combination pharmacotherapy. A variety of approaches are available, including fixed dose combinations (FDC) versus individual components (IC). The purpose of this analysis was to assess combination valsartan and hydrocholorthiazide (HCTZ) therapy in previously antihypertensive naïve patients. **METHODS:** A national database of insured patients ages 18 & older with hypertension were evaluated for combination valsartan and HCTZ use initiated within 180 days of each other. Patients had at least two claims for this combination of pharmacotherapy within one year of their first prescription. Eligibility included continuous enrollment 110 days prior to first prescription and 365 days following dual therapy. Eligible patients were antihypertensive naïve 110 days prior to study drug initiation. Combination pharmacotherapy persistency at 365 days was calculated and sensitivity analysis was performed for the length of refill gaps. **RESULTS:** There were 2,022,578 unique patients age18 years or older identified with hypertension ICD-9 codes (401.0, 401.1, 401.9, 402.1 & 402.9). After applying study criteria there were 8711 eligible patients; 8150 FDC and 561 IC. In assessing ongoing persistence, patients could not have a refill gap in excess of 120% of previous prescription day's supply. FDC persistency was 54% (4362/8150) compared to 19% (109/561) for IC at 365 days (p < 0.0001). Using a more stringent threshold (80% days supply), FDC was 44% (3623/8150) vs. IC 16% (91/561) p < 0.0001. Increasing the threshold (160% days supply) the FDC was 59% (4821/8150) vs. IC 21% (119/561) p < 0.0001. **CONCLUSIONS:** Use of FDC is more common (93.5%) than individual components for this previously naïve antihypertensive population. The fixed dose combination therapy group was shown to have significantly better persistence at 365 days vs. the individual components group, which proved to be quite robust following a sensitivity analysis.

PCV86

CHARACTERIZATION OF HYPERTENSIVE PATIENTS WHO MIGHT BENEFIT FROM A COMBINATION OF TWO DRUGS IN ONE PILL FOR REDUCTION OF CARDIOVASCULAR RISK

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Reduction of cardiovascular risk frequently requires the co-administration of multiple antihypertensive (AH) and lipid lowering (LL) drugs. Fixed combinations of two drugs could improve daily compliance by simplifying the treatment regimen. **OBJECTIVE:** To assess which antihypertensive patients might benefit from a combination of AH and LL drugs. **METHODS:** Hypertensive patients (>=30 years plus >=3 cardiovascular risk factors or events (CVD), experienced or new users of antihypertensive drugs between June 2003-June 2004)were selected from the IPCI database in The Netherlands. A written questionnaire was administered in October 2005 regarding reasons for non-compliance, likelihood of missing a dose if two pills would be combined in one, and self-reported medication-taking. Percentage of days covered (PDC) with AH medication was calculated from the prescription records. **RESULTS:** A total of 729 out of 1473 patients responded, 101 were new users of antihypertensive drugs, 349 had CVD. Respondents (75% male, median age 63 years) used on average 3 drugs, and 40% used LL drugs at start of follow-up. Side effects, lack of efficacy, and forgetting

scored highest as reasons for not taking medications as prescribed. The median PDC for antihypertensive drugs was 57%, less than 40% had PDC >80%, with newly treated hypertensive patients commonly =<80% PDC. 35% would be less likely or much less likely to miss a dose if two pills would be combined in one tablet, this likelihood was independent of CVD, experienced or new use and calculated PDC levels. Perceived likeliness to benefit from a combined tablet was significantly higher in persons taking fewer AH drugs, and patients self-reporting taking =<20% of doses. **CONCLUSION:** Patients newly treated with antihypertensive drugs and additional cardiovascular risk factors may benefit most from a fixed combination of two cardiovascular risk reducing drugs in one pill since they express more partial adherence and use fewer tablets.

PCV87

COMPARING COMPLIANCE AND PERSISTENCE RATES FOR HYPERTENSION, DYSLIPIDEMIA, AND DIABETES MEDICATIONS

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OBJECTIVES: Noncompliance and non-persistence with long-term medication is a serious world-wide problem that leads to compromised health benefits and serious economic consequences. A systematic literature review was conducted to compare rates of compliance and persistence among studies of treatments for hypertension, dyslipidemia, and diabetes. **METHODS:** A search of the literature (2000–2005) was focused on publications that provided a numeric measure of medication compliance and/or persistence, an adequate description of methods, and numeric compliance and/or persistence rates for antihypertensives (AHT), lipid-lowering therapy (LLT), or oral antidiabetics (OAD). Studies were classified according to their source of data into pharmacy claims and electronic monitors (Medication Event Monitoring System, MEMS), and by study design into retrospective and prospective studies. Results reported as medication possession ratio (MPR) were extracted and averaged over the treatment arms of the studies. Compliance rates were compared across study design and treatment class. **RESULTS:** The literature review resulted in 139 studies assessing treatment with one or more targeted medications: AHT =53, LLT =32, OAD =35, multiple treatments =19. Twelve-month compliance rates averaged 67% for AHT, 74% for LLT, and 76% for OAD drugs (overall 72 ± 18%).Compliance rates averaged 79% among prospective and 71% among retrospective studies (NS). Persistence estimates at 12 months from 22 studies ranged between 35% and 92% (mean 63 ± 18%). Thirty-five percent of the reports related compliance to treatment outcomes. Similar proportions were observed across classes. The proportion of MEMS studies reporting outcomes related to compliance or persistence was higher than studies based on pharmacy claims: clinical consequences (52% vs. 18%), health care utilization (14% vs 4%), and lower for no outcome data (33% vs. 78%) ($p = 0.004$). **CONCLUSION:** These data indicated comparable compliance and persistence rates across treatments for hypertension, dyslipidemia, and diabetes with three-fourths of medication taken as prescribed and two-thirds of patients continuing for one year.

PCV88

MEDICATION TREATMENT PATTERNS FOR DYSLIPIDEMIA IN US

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OBJECTIVES: Assess prevalence and discontinuation rates of antidyslipidemic therapy in patients with dyslipidemia. **METHODS:** We conducted a retrospective cohort study using a large US national database of electronic medical records containing diagnosis, lab and medication information. Users of antidyslipidemics were identified. Prevalence of six classes of antidyslipidemics was described and one-year discontinuation rate was calculated. Logistic regression model was used to evaluate factors affecting drug discontinuation. **RESULTS:** We identified 153,505 patients who started antidyslipidemic therapy from 1997 to 2004 and were followed for one year after drug initiation. Among 214,440 distinct treatment regimen initiations, 79.5% were statins, with atorvastatin (52.7%) and simvastatin (24.0%) being the most frequently prescribed. Prevalence of other classes of antidyslipidemics was: 8.8% for fibrates, 5.3% for cholesterol absorption inhibitors, 3.3% for niacin, 2.7% for bile acid-binding resins, and 0.5% for combination formulations. One-year discontinuation rate was 28.6% for statins, 31.8% for cholesterol absorption inhibitors, 34.1% for fibrates, 40.7% for combination formulations, 44.7% for niacin, and 50.1% for bile acid-biding resins. Logistic regression showed that statin users were less likely to stop therapy than patients on other classes (odds ratio (OR): 0.63). Surprisingly, patients with coronary hear disease (OR: 1.22) and diabetes (OR: 1.13) were more likely to discontinue treatment than patients without those conditions; high LDL-C or TG and low HDL-C were also found to be associated with higher rates of medication discontinuation at one year. **CONCLUSIONS:** Our study showed that significant variation exists in medication discontinuation among different classes of antidyslipidemics. Medications targeting to raise HDL-C or lower TG had higher discontinuation rate, implying that there were unmet needs for the treatment of abnormal HDL-C or TG. High discontinuation rate for patients at high risk for cardiovascular disease was a major concern. Further studies are needed to assess the consequences and implications of medication discontinuation.

PCV89

THE RELATIONSHIP BETWEEN PATIENT BELIEFS AND ADHERENCE TO CHOLESTEROL-LOWERING MEDICATIONS: IMPLICATIONS FOR DISEASE MANAGEMENT PROGRAMS

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OBJECTIVE: To evaluate the impact of patient beliefs on medication non-adherence for the purpose of crafting medication adherence messages for disease management programs. **METHODS:** In late 2005, 5630 respondents to the Thomson Medstat PULSE health behavior survey, a nationally representative U.S. survey, reported having high cholesterol. Respondents received additional cholesterol-specific questions beyond demographic/clinical questions already part of the survey. Beliefs about the necessity of and concerns about taking their medications were assessed via five likert-scale questions each with summed scores ranging between five and 25. A cut-point of 15 was used to identify high versus low necessity or concerns. Four patient segments resulted representing high necessity/high concern, low necessity/high concern, low necessity/low concern,